

PTILOTUS ERIOTRICHUS (AMARANTHACEAE) REVISITED

by

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ABSTRACT

Short, P.S. *Ptilotus eriotrichus* (Amaranthaceae) revisited. *Muelleria* 7(4): 491–494 (1992). — The types of the names *Ptilotus eriotrichus* W. Fitzg. and *Trichinium eriotrichum* W. Fitzg. ex Ewart & White have been examined and the names found to be taxonomic synonyms. The combination *Ptilotus eriotrichus* (W. Fitzg. ex Ewart & J. White) P. Short is an illegitimate later homonym of *Ptilotus eriotrichus* W. Fitzg., the correct name for the species under discussion.

INTRODUCTION

Recently I (Short 1991) published a new combination, *Ptilotus eriotrichus*, based on *Trichinium eriotrichum* W. Fitzg. ex Ewart & White (1910). However, the validly published name *Ptilotus eriotrichus* W. Fitzg. (1912), which is generally believed to apply to the same species, precludes my combination and therefore renders it illegitimate or, if based on the same type, redundant, because the combination already exists.

The types of *Ptilotus eriotrichus* W. Fitzg. and *Trichinium eriotrichum* W. Fitzg. ex Ewart & White, are quoted in the protologues as 'Cowcowing; Max Koch (no. 1217)' and 'Cowcowing, Max Koch, 1904' respectively. To ascertain whether the two names definitely refer to the same species or whether a new name is needed for *Trichinium eriotrichum* when transferred to *Ptilotus*, I examined pertinent publications, correspondence and herbarium specimens which may qualify as types of the two names and checked their identity and handwriting on the specimen labels against letters of known autography.

PUBLICATIONS

Trichinium eriotrichum W. Fitzg. ex Ewart & White and *Ptilotus eriotrichus* W. Fitzg. were independently and validly published. The later *Ptilotus eriotrichus* W. Fitzg. is clearly not based on the earlier *Trichinium eriotrichum* W. Fitzg. ex Ewart & White as would appear from the erroneous author citation '(W. Fitzg. ex Ewart & White) W. Fitzg.' used by some writers (e.g. Benl 1971; Green 1981, 1985) for *Ptilotus eriotrichus*. As previously noted (Short 1991) this is evident from several sources, i.e. Fitzgerald's lack of reference to their work in his publication, the note, presumably by James Britten (Anon. Sept. 1912) that Fitzgerald's paper had been in the possession some time before its publication, and the claim by Ewart (Dec. 1912) that he had unsuccessfully attempted to contact Fitzgerald about the publication of his manuscript names.

UNPUBLISHED CORRESPONDENCE

Letters to Koch from Fitzgerald and Ewart, between Fitzgerald and Ewart, and from Ewart to Maiden (Ewart 1907–1909; Fitzgerald 1907–1908) were examined to try to ascertain just when, and where from, the authors of both names acquired specimens. The letters from Fitzgerald to Koch indicate that Fitzgerald saw collections of various species gathered by Koch in both MEL and NSW, and that initially Ewart sent collections gathered by Koch to him for study. At no stage

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do Fitzgerald's letters to either Koch or Ewart specifically refer to *Ptilotus eriotrichum* or *Trichinium eriotrichum* or the specimen *Koch 1217*. However, in a letter dated 6 August 1907 and sent to Koch, Fitzgerald does mention various collections gathered by Koch in 1904 and 1905 that had been brought to his attention by Maiden when visiting NSW. Amongst these were specimens of *Acacia ewartiana*, a species described in the same paper as *P. eriotrichus*. This suggests that Fitzgerald first saw material of *Koch 1217* when in NSW.

Correspondence suggests that Ewart first saw material of *Koch 1217* when it was sent from NSW. In a letter dated 10 July 1907 and sent to Fitzgerald, Ewart stated that 'Regarding Koch's specimens, I should be glad if you would send me a portion of each labelled in your handwriting, especially of the new species'. Ewart subsequently recorded in a letter to Maiden dated 10 March 1909 that:

'Under date July 19th 07 I received from you some West Australian specimens collected by Max Koch with M.S. names by W. V. Fitzgerald. I find on examination that No. 1522 *Petrophila* . . . We have specimens (Koch's) marked by Fitzgerald with new names as W.V.F. inedit. on Herb. Sydney labels (*Angianthus axiliflorus* W.V.F. inedit. etc.) Do you know whether and where Fitzgerald has published these?'

It would seem that the aforementioned parcel did include a specimen of *Koch 1217*. A letter from Ewart to Koch dated 20 May 1909 reads:

'1217 Labelled *Ptilotus eriotrichus* W. V. Fitzg. It does not agree exactly with any of our types. Has the name been published? If so! Where? Can you spare any more material of 1217, 1662 & 1616?'

He was to repeat his request to Koch for 'more material of No. 1217 *Ptilotus eriotrichus*, W. V. Fitzgerald M.S.' in a letter dated 16 August 1909.

Thus the available correspondence suggests that it is quite possible that Ewart and White's description of *Trichinium eriotrichum* was based on a specimen that had been viewed by Fitzgerald and which would also be a syntype of the name *Ptilotus eriotrichus*. It also suggests that with the movement of specimens there is a possibility that *P. eriotrichus* W. Fitzg. could have been based on syntype material of *T. eriotrichum* Ewart & White that was returned to NSW.

COLLECTIONS OF KOCH 1217

In the search for the types of the two names, the following sheets, all annotated as *Koch 1217* and labelled as coming from Cowcoving, have been examined:

NSW 238289: this specimen is accompanied by a printed 'W. V. Fitzgerald' herbarium label that has in Fitzgerald's hand the information '*Ptilotus eriotrichus* W.V.F./ Type/ Coll. Max Koch/ Cowcoving/ September 1904'. At some stage the spelling of the specific epithet has been altered to '*eriotrichus*', as appeared in Fitzgerald's publication. Koch's original label is also attached and reads '*Amarantaceae/ 1217/ Ptilotus/ Loc. Cowcoving WA/ Coll. Max Koch. x.1904*'. Note the conflicting information on the respective labels as regards collecting times, i.e. October as opposed to September. There is no annotation suggesting that the specimen was examined by Ewart and White.

NSW 238290: the original collector's label has '*Ptilotus eriotrichus* W. V. Fitzg. n. sp.' in Koch's hand and the date of collection is recorded as 'ix.1904', i.e. August. It has not been annotated by Fitzgerald or by Ewart and White.

NSW 30522: the original collector's label has '*Ptilotus eriotrichus* W. V. Fitzg. n. sp.' in Koch's hand and the date of collection is recorded as 'ix.1904', i.e. September. It has not been annotated by Fitzgerald., nor I think by Ewart and White. There is a further handwritten label with the Ewart and White name which gives the place of publication but as far as I can ascertain it is in neither of their hands.

PERTH: the sheet has three labels and reference to both Fitzgerald's name and Ewart & White's name are made but are in Koch's hand. The specimen was gathered in August 1904.

MEL 1579234: this sheet contains the larger of the specimens of this species at MEL. The original label in Koch's hand, records '1217/ *Ptilotus eriотrichus*/ W. V. Fitzgerald/ n. sp./ Cowcowing/ ix. 1904'. Superimposed upon this label some one, I suspect White, has indicated that the collection is the 'type' of *Trichinium eriотrichum*. Also attached to this sheet are original notes pertaining to the illustration published by Ewart and White.

MEL 1579236: has no original labels, but has a note by a former MEL staff member that it is a 'fragment of the holo-type' of *T. eriотrichum*.

The three sheets of *Koch 1217* in NSW have been entered on the computerised NSW database with the note on two of them that 'this collection comprises 3 sheet(s), NSW nos.: 238289, 238290 & 30522'. However, they cannot be regarded as a single collection. As should be quite evident Koch used species numbers, not separate numbers, for each collection and this species was collected on three separate occasions, i.e. August, September and October 1904.

CONCLUSIONS AND TYPIFICATION

Examination of possible type material and comparison with the protologues of the two names *Trichinium eriотrichum* Ewart & J. White and *Ptilotus eriотrichus* W. Fitzg. has shown that they were based on different, but possibly duplicate, specimens of *Koch 1217*, and that there can be no doubt that the two names refer to the one species, i.e. that they are taxonomic synonyms. Therefore, there is no need for another name to accommodate *Trichinium eriотrichum* when referred to *Ptilotus*. The name *Ptilotus eriотrichus* W. Fitzg. is the correct name for this species when it is referred to *Ptilotus*.

PROBABLE HOLOTYPE OF *Ptilotus eriотrichus* W. Fitzg.

Although the correspondence suggests that Fitzgerald may have seen more than one specimen of *Koch 1217* this is not evident from specimen annotations. The only specimen annotated by Fitzgerald is NSW 238289. In the absence of firm evidence that he examined additional material I have not designated the latter specimen as the lectotype but regard it as a probable holotype. Specimens in MEL and NSW (listed below) that were gathered in Sept 1904 but not annotated by Fitzgerald are possible isotypes.

PROBABLE HOLOTYPE OF *Trichinium eriотrichum* Ewart & J. White

When describing *Trichinium eriотrichum* Ewart & White definitely had in their possession the material that is today distributed on two sheets, MEL 1579234 and MEL 1579236. No other material annotated by them has been located. It could be argued that additional specimens may have been examined by the authors and that it is more appropriate to select a lectotype. However, in the absence of concrete evidence that this occurred I believe that it is equally appropriate to regard MEL 1579234 as the probable holotype specimen of the name *Trichinium eriотrichum* Ewart & White and the fragmentary specimen MEL 1579236 as an isotype, as is NSW 30522, and possibly also NSW 238289.

***Ptilotus eriотrichus* W. Fitzg.**, *J. Bot.* 50: 22 (Jan. 1912) ('*eriostrichus*'). T: 'Cowcowing; *Max Koch* (no. 1217).' PROBABLE HOLOTYPE: Cowcowing, ?Oct. or Sept. 1904, *Koch 1217* (NSW 238289), annotated by Fitzgerald. POSSIBLE ISOTYPES: MEL 1579234, MEL 1579236, NSW 30522 (all gathered Sept. 1904, not annotated by Fitzgerald).

Trichinium eriотrichum W. Fitzg. ex Ewart & J. White, *Proc. Roy. Soc. Victoria* 22(2): 325 (April 1910). — *Ptilotus eriотrichus* (W. Fitzg. ex Ewart & J.

White) *P. Short*, *Muelleria* 7: 370 (1991), *nom. illeg., non P. eriotrichus* W. Fitzg. T: 'Cowcowing, Max Koch, 1904.' PROBABLE HOLOTYPE: Cowcowing, Sept. 1904, Koch 1217 (MEL 1579234), annotated apparently by J. White. ISOTYPE: MEL 1579236 (fragment removed from holotype), NSW 30522 (not annotated by Ewart or White, dated Sept. 1904). POSSIBLE ISOTYPE: NSW 238289 (not annotated by Ewart or White, collected ?Oct. or Sept. 1904).

THE SPELLING OF THE EPITHET IN THE NAME *Ptilotus eriotrichus* W. Fitzg.

In Fitzgerald's publication of *P. eriotrichus* (Jan. 1912) the spelling of the epithet was given as '*eriosrichus*'. The correct spelling of this compound word is undoubtedly '*eriotrichus*', to which it was subsequently corrected, presumably by the editor, in an 'Errata' (*J. Bot.* 50: 393, Dec. 1912). The late alteration to the spelling on the label of the probable holotype specimen of this name suggests that Fitzgerald meant to spell the epithet as '*eriotrichus*'. Following Art. 73 it is permissible to correct typographic and orthographic errors that occur in the original spelling of the epithet. Not surprisingly, and as far as I am aware, the spelling '*eriotrichus*' has been adopted in all works that have appeared subsequent to Fitzgerald's original publication (e.g. Benl 1971; Green 1981, 1985) and is used here.

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ADDENDUM

Since this manuscript was submitted a further specimen of *Koch 1217* that is also annotated as 'type' by Fitzgerald has been located in BM. Fitzgerald sent it along with his original manuscript to James Britten (unpublished letter in BM dated 1 Jan. 1912) and it is clearly another syntype specimen of the name *P. eriotrichus* W. Fitzg. It was gathered in August, not September, 1904. Therefore the collection NSW 238289 cannot be regarded as the probable holotype of the latter name but one of two definite syntype specimens. There are also specimens of *Koch 1217* in BM and K that were gathered in Sept. 1904. They are both annotated as *Ptilotus eriotrichus* W.V. Fitzg. by Koch. There is no evidence that they were seen by either Ewart and White or by Fitzgerald.